APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/346,412	07/01/1999	GREGORY A. JAMIESON	H16-25990	2387

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EXAMINER
TRAN, MYLINH T

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*Req. for Recon filed on 01/06/03*</u> .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1,6-24,27 and 29-58*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>*49-57*</u> is/are allowed.

6)☒ Claim(s) <u>*1,6,9-24,29,33-48 and 58*</u> is/are rejected.

7)☒ Claim(s) <u>*7, 8, 27 and 30-32*</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)		4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6)☐ Other: .

DETAILED ACTION

Applicant's request for reconsideration filed on 01/06/03 has been

carefully considered. However, arguments regarding rejections under 35.U.S.C

103 have not been found to be persuasive. Therefore, these claims 1, 6, 9-24,

29, 33-48 and 58 are rejected under the same ground of rejection as set forth in

the Office Action mailed (10/04/02).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically
disclosed or described as set forth in section 102 of this title, if the differences
between the subject matter sought to be patented and the prior art are such that
the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said
subject matter pertains. Patentability shall not be negatived by the manner in
which the invention was made.

Claims 1, 6, 9-19, 23-24, 29, 33-48 and 58 are rejected under 35

U.S.C. 103(a) as being unpatentable over Schaefer et al. [US. 4,675,147] in

view of Harrow et al. [US. 5,375,199].

As to claims 1, 24 and 58, Schaefer et al. discloses a scale extending along a

gauge axis (figure 1, column 9, lines 39-53), a graphical shape displayed along

the gauge axis representative of a current value of the process variable (column

3, lines 50-67) and one or more bars extending along the gauge axis (figure 1,

(18), (26) represent for bars); a first bar extending along the gauge axis,

wherein a first end of the first bar is representative of an engineering hard high

limit for the process variable and a second end of the first bar is representative

of engineering hard low limit for the process variable (figure 1, engineering high

limits (18-25), engineering low limits (26-33), column 8, line 30 through column

9, line 7). The differences between Schaefer et al. and the claim is a second bar

extending along the gauge axis, wherein a first end of the second bar is

representative of an operator set high limit for the process variable and a

second end of the second bar is representative of an operator set low limit for

the process variable. Harrow et al. teaches the second pair of high and low limit

elements (figure 13A, 206, 208, column 2, lines 38-44, column 19, lines 1-10). It

would have been obvious to one of ordinary skill in the art, having the teachings

of Schaefer et al. and Harrow et al. before them at the time the invention was

made to modify the gauge axis and the graphical shape taught by Schaefer et

al. to include the user defining high and low limits of Harrow et al., in order to

provide a dragging the slider portion of the second interactive icon into the top

or bottom of the underlying graphic display of data causing the scale of the

underlying data to expand or contract so that any value on the underlying

display of graphical data may be set, as taught by Harrow et al.

As to claims 6 and 29, while Schaefer teaches more detail about the

engineering hard high and low limits for the process variable on figure 1, (18),

(26), Harrow et al. teaches the second bar extending along the gauge axis

representative of operator set high and low limits for the process variable (figure

13A, 206, 208, column 2, lines 38-44, column 19, lines 1-10).

As to claim 9, Harrow et al. also discloses the graphical user interface further includes user manipulation elements movable to change one or more of the high and low process limit values (column 19, lines 1-10).

As to claim 10, while Schaefer et al. shows the scale extending along the gauge axis (figure 1), Harrow teaches the movement of the user manipulation elements at column 9, lines 23-47.

As to claims 11, 12, 35, 36 and 37, Schaefer et al. also shows the user manipulation elements include one or more manipulation pointer flags associated with operator set limits, the one or more manipulation pointer flags are draggable along the gauge axis to change such operator set limits and the user manipulation elements include one or more manipulation pointer flags associated with the engineering hard limits, the one or more manipulation pointer flags are draggable along the gauge axis to change such engineering hard limits (column 3, lines 50-65).

As to claims 13, 34, 38 and 40, Schaefer et al. demonstrates the graphical shape representative of the current value of the process variable that is a pointing device proximate to the scale (column 13, lines 46-67 and column 14, lines 1-35).

As to claim 14, Schaefer et al. teaches graphical user interface further includes at least one additional graphical shape displayed along the gauge axis representative of at least one additional value for the process variable (figure 5, column 16, lines 25-50)

As to claims 15, 17 and 39, Schaefer et al. also teaches the additional graphical

shape representative of at least one additional value for the process variable

that has a color of a set of colors that reflects the state of the current value for

the process variable relative to the set of high and low process limit values

(column 15, lines 20-32).

As to claim 16, Schaefer et al. shows the scale extending along the gauge axis

is adjustable as a function of a current value of the process variable relative to

the one or more process limits values (figure 6, column 13, lines 47-65).

As to claim 18, Schaefer et al. also shows a color for the graphical shape

represents one of a current value of the corresponding process variable being

within the set of high and low process limit values, the current value of the

corresponding process variable being within a certain percentage of a limit

value of the set of high and low process limit values, and the current value of

the corresponding process variable being outside of the set of high and low

process limit values (column 15, lines 20-32).

As to claim 19, Schaefer et al. discloses a background of a region adjacent the

one or more bars along the gauge axis is of a color when the graphical shape

representative of the current value of the process variable is outside of the high

and low process limit values, and further wherein the region is representative of

engineering physical limits of the process variable (column 9, lines 39-66). It is

inherent that the user low and high limit values would be inside the engineering

high and low limits since they are set for safety. Therefore, it is easy to

understand that the graphical shape representative of the current value of the

process variable is outside of the high and low process limit values.

As to claim 33, Harrow et al. also demonstrates displaying user manipulation

elements movable to change one or more of the high and low process limit

values, moving such user manipulation elements to generate data

representative of changed high or low process limit values; and providing such

data to a controller of the process (figure 13A, 206, 208, column 2, lines 38-44,

column 19, lines 1-10 and column 9, lines 24-46).

As to claim 41, Schaefer et al. shows rescaling the scale extending along the

gauge axis as a function of the current value of the process variable relative to

the set of high and low process limit values (column 8, lines 60-68 and column

9, lines 1-7).

As to claim 42, Schaefer et al. also shows displaying the graphical shape

representative of the current value of the process variable includes: determining

a state of the current value of the process value relative to the set of high and

low process limit values and displaying the graphical shape in a color of a set of

colors that reflects the state of the current value for the process variable

(column 17, lines 4-49).

As to claim 43, Schaefer et al. teaches determining the state of the current

value of the process value relative to the set of high and low process limit

values includes determining whether the current value of the process variable is

within the set of high and low process limit values (column 11, lines 11-37), and

determining whether the current value of the process variable is within a certain

percentage of a limit value of the set of high and low process limit values, and

determining whether the current value of the process variable is a certain

percentage outside of the set of high and low process limit values (column 9,

lines 30-38).

As to claim 44, Schaefer et al. also teaches determining whether the current

value of the process variable is outside of the set of high and low process limit

values and displaying a graphical element representative of engineering

physical limits of the process variable when the current value of the process

variable is outside the set of high and low process limit values (figure 1, 16,

column 8, lines 36-59). It is inherent that the user low and high limit values

would be inside the engineering high and low limits since they are set for safety.

Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Schaefer et al. [US. 4,675,147] in view of Harrow et al. [US. 5,375,199]

and further in view of van Weele et al. [US. 5,631,825].

As to claim 20, the difference between Schaefer, Harrow and the claim is a

trend graph. van Weele et al. discloses the graphical user interface further

includes a trend graph for the process variable (column 6, lines 30-35). It would

have been obvious to one of ordinary skill in the art, having the teachings of

Schaefer et al., Harrow et al., and van Weele et al. before them at the time the

invention was made to modify the gauge axis, the graphical shape and operator

set limit for the process variables as taught by Schaefer et al. and Harrow to

include the trend graph of van Weele et al. in order to provide data input means

for selecting one of a set of preselected process primitives, and means for

indicating a value for the selected process primitive and substituting the input

value for that primitive as the value to be monitored and controlled by the PCC,

as taught by van Weele et al.

As to claim 21, van Weele et al. also discloses the trend graph includes at least

one of a historical trend graph and a prediction trend graph for displaying trend

information representative of process variable values (column 14, lines 10-65).

As to claim 22, van Weele et al. teaches the trend graph includes at least one of

a historical trend graph and a prediction trend graph for displaying trend

information representative of process variable limits (figures 20-21, column 36,

lines 35-52).

As to claim 23, van Weele et al. also teaches the one or more process variables

include a plurality of manipulated variables and a plurality of controlled variables

of a continuous multivariable process (column 35, lines 31-61).

As to claim 45, van Weele et al. demonstrates displaying a graphical element

representative of engineering physical limits of the process variable includes

displaying a background region adjacent the one or more bars along the gauge

axis in a particular color representative of engineering physical limits (column 6,

lines 30-65). Schaefer et al. teaches color more clearly on column 9, lines 39-

53.

As to claim 46, van Weele et al. also demonstrates displaying a trend graph for the process variable with the displayed scale, one or more bars, and the graphical shape representative of the current value of the process variable (column 14, lines 11-26).

As to claim 47, van Weele et al. discloses displaying the trend graph includes displaying at least one of a historical trend graph and a prediction trend graph for the process variable representative of process variable values (column 14, lines 27-67).

As to claim 48, van Weele et al. also discloses displaying the trend graph includes displaying at least one of a historical trend graph and a prediction trend graph for the process variable representative of process variable limits (figures 20-21, column 14, lines 1-50).

Response to Arguments

Regarding claims 1, 24 and 58, Applicant has argued that Schaefer and Harrow fail to teach or suggest "a first bar and a second bar that both extend along the same gauge axis". However, the Examiner does not agree. It is noted that the limitation "the first bar and second bar...are on the same gauge axis" is not recited in the claim. Also, Schaefer discloses a first bar extending along the gauge axis, wherein a first end of the first bar is representative of an engineering hard high limit for the process variable and a second end of the first bar is representative of engineering hard low limit for the process variable at figure 1, engineering high limits (18-25), engineering low limits (26-33), column

8, line 30 through column 9, line 7 and Harrow teaches the second bar

extending along the gauge axis, wherein a first end of the second bar is

representative of an operator set high limit for the process variable and a

second end of the second bar is representative of an operator set low limit for

the process variable at figure 13A, 206, 208, column 2, lines 38-44, column 19,

lines 1-10).

Regarding claims 6, 29 and 58, Applicant argues that Schaefer and Harrow fail

to teach "the second bar extends along the gauge axis within the first bar".

Applicant's attention is directed to column 3, line 65 through column 4, line 13 of

Harrow. Because the second bar is representative of an operator limit for the

process variables, it can be moved up and down on the bar to be within the first

bar of engineering limit.

Regarding claims 11, 12 and 35-37, Applicant argues that Schaefer does not

teach "pointer flags are draggable along a gauge axis to change engineering

hard limits". However, Applicant's attention is directed to the column 3, lines 50-

65.

Regarding claims 14 and 39, Applicant has argued that Schaefer fail to show

that "at least one additional graphical shape displayed along the gauge axis

representative of at least one additional value for the process variable".

However, Applicant's attention is directed to the figure 5, column 16, lines 25-50

and column 15, lines 20-32.

Regarding claim 19, Applicant argues that the prior art does not teach all limitations in the claim. However, Applicant's attention is directed to column 9, lines 39-66. Schaefer et al. discloses a background of a region adjacent the one or more bars along the gauge axis is of a color when the graphical shape representative of the current value of the process variable is outside of the high and low process limit values, and further wherein the region is representative of engineering physical limits of the process variable. Also, it is inherent that the user low and high limit values would be inside the engineering high and low limits since they are set for safety. Therefore, it is easy to understand that the graphical shape representative of the current value of the process variable is outside of the high and low process limit values.

Regarding claim 33, Applicant has argued that Harrow et al. fails to show displaying user manipulation elements movable to change one or more of the high and low process limit values, moving such user manipulation elements to generate data representative of changed high or low process limit values; and providing such data to a controller of the process. However, prior art show the limitations at figure 13A, 206, 208, column 2, lines 38-44, column 19, lines 1-10 and column 9, lines 24-46.

Regarding claim 44, Applicant has argued that Schaefer et al. also does not teach determining whether the current value of the process variable is outside of the set of high and low process limit values and displaying a graphical element representative of engineering physical limits of the process variable

when the current value of the process variable is outside the set of high and low

process limit values. However, the Examiner does not agree. Schaefer et al.

shows the limitation at figure 1, 16, column 8, lines 36-59. It is inherent that the

user low and high limit values would be inside the engineering high and low

limits since they are set for safety.

Regarding claim 45, Applicant also argues that van Weele et al. does not teach

displaying a graphical element representative of engineering physical limits of

the process variable includes displaying a background region adjacent the one

or more bars along the gauge axis in a particular color representative of

engineering physical limits. However, while van Weele shows displaying a

graphical element representative of engineering physical limits at column 6,

lines 30-65, Schaefer et al. teaches color more clearly on column 9, lines 39-53.

Regarding claims 46-48, Applicant argues that there is not suggestion or

motivation to modify the reference or to combine references. However, the

motivation to combine between Schaefer, Harrow and van Weele is to provide

data input means for selecting one of a set of preselected process primitives,

and means for indicating a value for the selected process primitive and

substituting the input value for that primitive as the value to be monitored and

controlled by the PCC.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension

of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply

is filed within TWO MONTHS of the mailing date of this final action and the

advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on

the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In

no event, however, will the statutory period for reply expire later than SIX

MONTHS from the mailing date of this final action.

Conclusion

Responses to this action should be mailed to: Commissioner of Patents and

Trademarks, Washington, D.C. 20231. If applicant desires fax a response,

(703) 746-7238), may be used for formal After Final communications, (703)

746-7239 for Official communications, or (703) 746-7240 for Non-Official or

draft communications. NOTE, A Request for Continuation (Rule 60 or 62)

cannot be faxed.

Please label "PROPOSED" or "DRAFT" for information facsimile

communications. For after final responses, please label "AFTER FINAL" or

"EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran whose telephone number is (703) 308-1304. The examiner can normally be reached on Monday-Thursday from 8.00AM to 6.30PM

If attempt to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Kristine Kincaid, can be reached on (703) 308-0640,

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Mylinh Tran

Art Unit 2174

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